US Highway 71, Clay County, Iowa

US Highway 71 is a major north-south artery that intersects east-west US Highway 20. The highway was originally paved with 7 in. concrete in 1931.

The highway was plagued with thermal cracks, failing joints, severe joint roll-down, and bottom-up cracking. The contractor, Cedar Valley Corp, performed the work on this 6.88 mi. project, which called for milling the existing highway and placing a 124,000 SY of nominal 6 in. unbonded concrete overlay.

The transition areas presented their own set of challenge, including the paving thickness, which abruptly changed from 6 in. to 16 in. The contractor was concerned about smoothness, and the likelihood of creating either a bump or a dip. To solve the problem, CVC paved the 10 inches by hand, with the help of a material placement/transfer machine, to bring the transition panel up to the existing elevation. This allowed the contractor to pave the remaining 6 in. with the paver while the 10 in. of concrete was still plastic.

The DOT assigned 116 working/calendar days to this project. Cedar Valley started the project on June 17, and completed the entire project by October 28, earning additional in time incentive pay for completing work ahead of schedule.

LOCATION: Clay County, IA

CONTRACTOR: Cedar Valley Corp., LLC

OWNER/ENGINEER: Iowa Department of Transportation

FINISHED AHEAD OF SCHEDULE

124,000 SY

6.88 MI.

American Concrete Pavement Association

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